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10/521,694	01/18/2005	Eckard Steiger	10191/3728	1217

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EXAMINER

NGUYEN, CHUONG P

ART UNIT	PAPER NUMBER
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3663

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/521,694	STEIGER, ECKARD	
	Examiner	Art Unit	
	Chuong Nguyen	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-29 is/are pending in the application.
- 4a) Of the above claim(s) 10-13 and 16-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 15 and 19-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' 05/07/2007 Amendment, which directly amended specification; amended claims 14-15; added new claims 19-29; and traversed the rejection of the claims of the 02/28/2007 Office Action are acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 20, "at least two bits which are set whenever at least one fault is detected, the two bits including a first bit indicating that at least one fault is detected and a second bit associated with a particular detected fault" is a new matter. Reviewing the specification does not result in any description regarding the at least two bits as claimed.

4. Claims 14-15, 19-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 14, 19, 24-26, the sensor is essentially a black box with no description of the internals thereof. The disclosure is thus insufficient in failing to set forth in an adequate and sufficient fashion, a description of the internals of the sensor which would enable the device to perform all of the features (i.e. monitoring fault pattern, performing analog-to-digital conversion of the sensor signal, etc.) that are disclosed and claimed. If applicant is of the opinion that there is a description in the prior art (in the form of literature, etc. having a date prior to the filing date of this application), of the internals of the sensor that can accomplish the disclosed and claimed features (i.e. monitoring fault pattern, performing analog-to-digital conversion of the sensor signal, etc.), copies of said literature, etc., must be submitted for appropriate review by the Office. See *In re Ghiron et al*, 169 USPQ 723, 727.

Other claims are also rejected based on their dependency of the parent claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 14, 19, 21-24, 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Raypole et al (6,721,639).

Regarding claim 14 and as best understood, Raypole et al disclose in Fig 1 a control unit (i.e. broadly interpreted as the digital steering sensor system including steering module 30,

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steering sensor 20, RTD 22, controller modules 24) comprising: a sensor (i.e. steering sensor 20) inherently comprising a sensor element (i.e. internal structure of a sensor), at least one digital interface (i.e. digital – Phase A, B, Index) (col 2, at least line 51), and means for transmitting a fault pattern via the at least one digital interface (i.e. communication from steering sensor 20 to RTD 22 via digital – Phase A, B, Index) (col 2, at least line 51), wherein the fault pattern is a digital fault pattern comprising individual bits corresponding to different fault flags (Fig 6, 8; at least col 5, line 64); and a processor (i.e. microprocessor) that receives at least one signal from the sensor via the at least one digital interface, wherein the at least one sensor signal includes the fault pattern and the processor evaluates the at least one sensor signal as a function of the fault pattern (col 3, lines 20-30).

Regarding claim 15, Raypole et al disclose the sensor is disposed inside a housing of the control unit (i.e. broadly interpreted as the digital steering sensor system including steering module 30, steering sensor 20, RTD 22, controller modules 24) (Fig 1).

Regarding claim 19 and as best understood, Raypole et al disclose each fault flag (i.e. Phase A, B, Index) corresponds to a different sensor-internal monitoring mechanism (Fig 1, 6, 8; col 3, line 1-19).

Regarding claim 21 and as best understood, Raypole et al disclose a memory connected to the processor (col 3, lines 20-30).

Regarding claim 22 and as best understood, Raypole et al disclose a data output that is connectable to a restraint system of an automotive system (Fig 1; col 2, at least line 61).

Regarding claim 23 and as best understood, Raypole et al disclose a monitoring circuit (i.e. input/output circuits; RTD 22; controller modules 24) connectable to the digital interface of

the sensor for evaluating the at least one sensor signal and influencing the enabling of a restraint arrangement based on the evaluation of the at least one sensor signal (col 3, at least line 20).

Regarding claim 24 and as best understood, Raypole et al disclose the sensor element is for acquiring a measured variable (Fig 1, 3, 7, at least col 2, line 47; col 4 – col 8).

Regarding claim 27 and as best understood, Raypole et al disclose the sensor continuously updates the fault pattern (Fig 6; at least col 5, line 64).

Regarding claim 28 and as best understood, Raypole et al disclose the fault pattern includes a value of a measured variable which produced a fault (Fig 4, 6, 8; at least col 4, line 45).

Regarding claim 29 and as best understood, Raypole et al disclose the sensor includes a rotation rate sensor (i.e. broadly interpreted as steering sensor) for an automotive system (Fig 1 “20”).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 15, 20, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raypole et al.

Regarding claim 20, Raypole et al disclose the invention except for the fault pattern includes at least two bits which are set whenever at least one fault is detected, the two bits

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including a first bit indicating that at least one fault is detected and a second bit associated with a particular detected fault. However, Raypole disclose that fault is detected by a single fault bit (col 6, lines 12-61). It would have been an obvious matter of design choice to include at least two bits which are set whenever at least one fault is detected, since applicant has not disclosed that including at least two bits which are set whenever at least one fault is detected solves any stated problem or is for any particular purpose. It appears that invention would perform equally well with a single fault bit as taught by Raypole et al.

Regarding claims 25-26 and as best understood, it appears that Raypole et al would be concerned with a functional and monitoring module for performing analog-to-digital conversion of the sensor signal, including the measured variable and for monitoring the sensor (i.e. communication of steering module and steering and RTD or other controller module) (Fig 1; at least col 2, line 51).

9. While patent drawings are not drawn to scale, relationships clearly shown in the drawings of a reference patent cannot be disregarded in determining the patentability of claims. See In re Mraz, 59 CCPA 866, 455 F.2d 1069, 173 USPQ 25 (1972).

10. The statements of intended use or field of use (i.e. claim 14 – that receives; claim 23 – for evaluating, for influencing; claim 24 – for acquiring; claim 25 – for performing; claim 26 – for monitoring), and "wherein" clauses (i.e. claim 1, last paragraph) are essentially method limitations or statements of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See In re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re

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Finsterwalder, 168 USPQ 530; In re Casey, 512 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Response to Arguments

11. Applicant's arguments with respect to claim 14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong Nguyen whose telephone number is 571-272-3445. The examiner can normally be reached on 8:00 - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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